

## A new *Paramaronius* species from Argentina (Coleoptera: Cantharidae)

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**Abstract:** The new species *Paramaronius unituberculatus* sp. nov. from Salta province, northern Argentina, is described and illustrated. An updated identification key including also the new species is provided.

**Keywords:** Chauliognathinae - description - key - neotropical - taxonomy.

### INTRODUCTION

*Paramaronius* Wittmer, 1963 is readily recognized by the remarkable sculptural modifications and pubescence on the elytra of males (Wittmer, 1963; Brancucci, 1982). Recently, new species were described from southeastern Brazil, and photographs of all known species as well as an identification key for the genus was provided (Biffi, 2015). Additionally, new records for some species considerably extended the distribution range of the genus. It is currently composed of nine species which are widely distributed in South America, from French Guiana to northern Argentina and from Bolivia to the southeastern Brazilian coast (Biffi, 2015; Constantin, 2016). Shortly after the publication of that work, specimens of a new *Paramaronius* species were found among the undetermined specimens from the Naturhistorisches Museum Basel (Switzerland).

Here, *Paramaronius unituberculatus* sp. nov., from Argentina, is described and illustrated and the identification key given in Biffi (2015) is updated to include the new species.

### MATERIAL AND METHODS

The type specimens of *Paramaronius unituberculatus* sp. nov. are deposited in the Naturhistorisches Museum Basel (NMB) and Museu de Zoologia da Universidade de São Paulo (MZSP).

Morphological terminology used in the description follows Biffi (2015) and Brancucci (1982). Photographs were taken with a Canon EOS Rebel T3i camera with Canon MP-E 65mm macro-lens and StackShot macro-

rail. Multi-focus images were combined with Zerene Stacker 1.04. Illustrations and photographs were edited in Adobe Photoshop CS6 and Adobe Illustrator CS6.

### TAXONOMY

#### *Paramaronius unituberculatus* sp. nov.

Figs 1-12

**Holotype:** NMB, 1♂; ARGENTINA, *Salta*, Salta (Cerro San Bernardo), 8.ii.1982, 1450 m, H & A Howden.

**Paratypes:** MZSP 7062; 1♀; ARGENTINA, *Salta*, i.1949, Wigodzinisky. – NMB; 1♀ Amblayo, ii.1945.

**Diagnosis:** *Paramaronius unituberculatus* sp. nov. is characterized by the single apical tubercle in the elytra of males and by the shapes of aedeagus and the seventh ventrite of males and females.

**Etymology:** The specific epithet is a derivative of the Latin words *uni* (one) + *tuberculatum* (tuberculate), referring to the single tubercle on the apex of each elytron.

**Description:** Head occipital region, center of clypeus and apex of mandibles light to dark brown; vertex, frons, sides of clypeus, genae and base of mandibles pale yellow; antennae light to dark brown, lighter on ventral side of three proximal antennomeres. Labial and maxillary palpi light brown, darker on last palpomeres. Pronotum pale yellow with two large dark brown lateral patches. Scutellum pale yellow. Elytra dark brown with yellow apical patch. Hind wings dark brown. Thorax



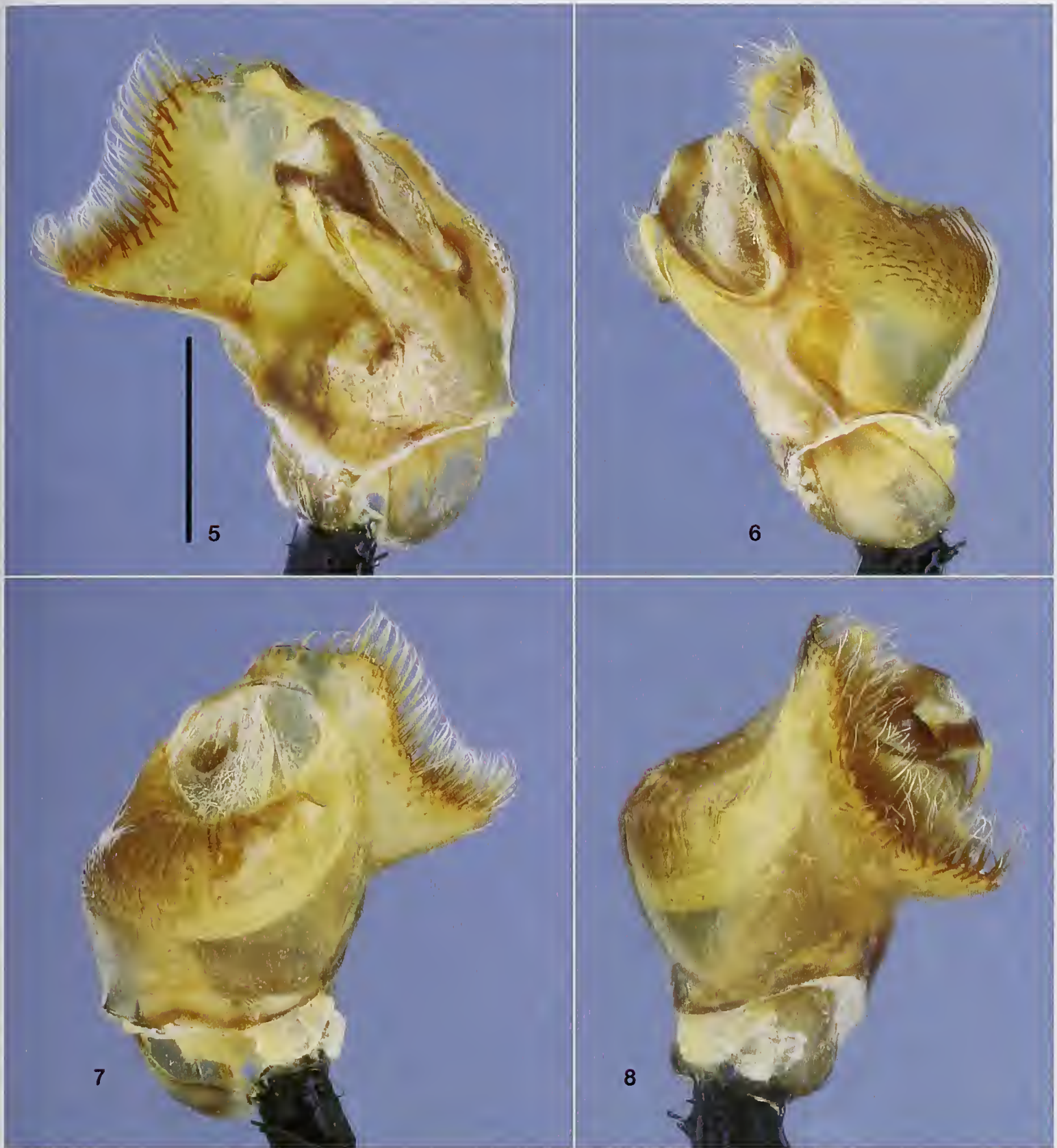
Figs 1-4. *Paramaronius unituberculatus* sp. nov. (1) Dorsal habitus of male (holotype, NMB). (2) Dorsal habitus of female (paratype, MZSP). (3) Detail of the elytra of male. (4) Detail of the elytra of female.

and legs light brown, darker on the dorsal surface of femora and pro- and mesothoracic tarsi. Abdomen dark brown, yellow on the margins of each ventrite and tergite; last ventrite completely brown.

*Male* (Fig. 1): head densely pubescent; vertex and occipital region flat, lateral margins slightly arcuate behind the eyes. *Antennae* long, with two antennomeres surpassing the apex of elytra; antennomere I slightly swollen apically, antennomere II three times shorter than I, antennomere III twice longer than II, antennomeres IV-VIII subequal in length, slightly longer than I, antennomeres VIII-XI progressively decreasing in length towards the apex. *Pronotum* as long as wide; anterior and posterior margins rounded; lateral margins slightly sinuate; anterior and posterior angles directed upwards. *Scutellum* triangular, apex widely rounded. *Elytra* (Fig. 3) densely pubescent, short, each elytron 2.6 times longer than wide; internal margins dehiscent from apical half, apex rounded; each elytron with a deep and broad hollow meeting medially; a dense fringe of long setae on the anterior wall and margin of hollows; dorsal surface with a large apical tubercle. *Legs* slender; tibiae longer than femora; tarsomeres

gradually increasing in size from pro- to metathoracic leg; first metatarsomere 1.85 times longer than second and 3.65 times longer than third. *Abdomen*: abdominal glandular pores slightly prominent. Seventh abdominal ventrite (Fig. 9) slightly wider than long, pubescent, distal margin slightly emarginated laterally and strongly emarginated and rounded at middle. *Aedeagus* (Fig. 5-8) with a large right prolongation of tegmen, broadly sinuous on posterior margin, covered with long and thick setae; base and dorsal surface with projecting apophysis; left setiferous prolongation long and curved, slightly clubbed, with few setae at apex; right paramere (Fig. 11) long, curved, narrowing upwards and divided in two opposite processes reaching both apophysis of tegmen; left paramere flat, long, divided apically and covering the base of dorsal surface of median lobe; median lobe long and slightly curved to the right; left surface of tegmen rough.

*Female* (Fig. 2): slightly smaller than the male; eyes smaller and more rounded; dorsal surface of elytra (Fig. 4) without sculptural modifications; seventh abdominal ventrite (Fig. 10) narrowed apicad, distal



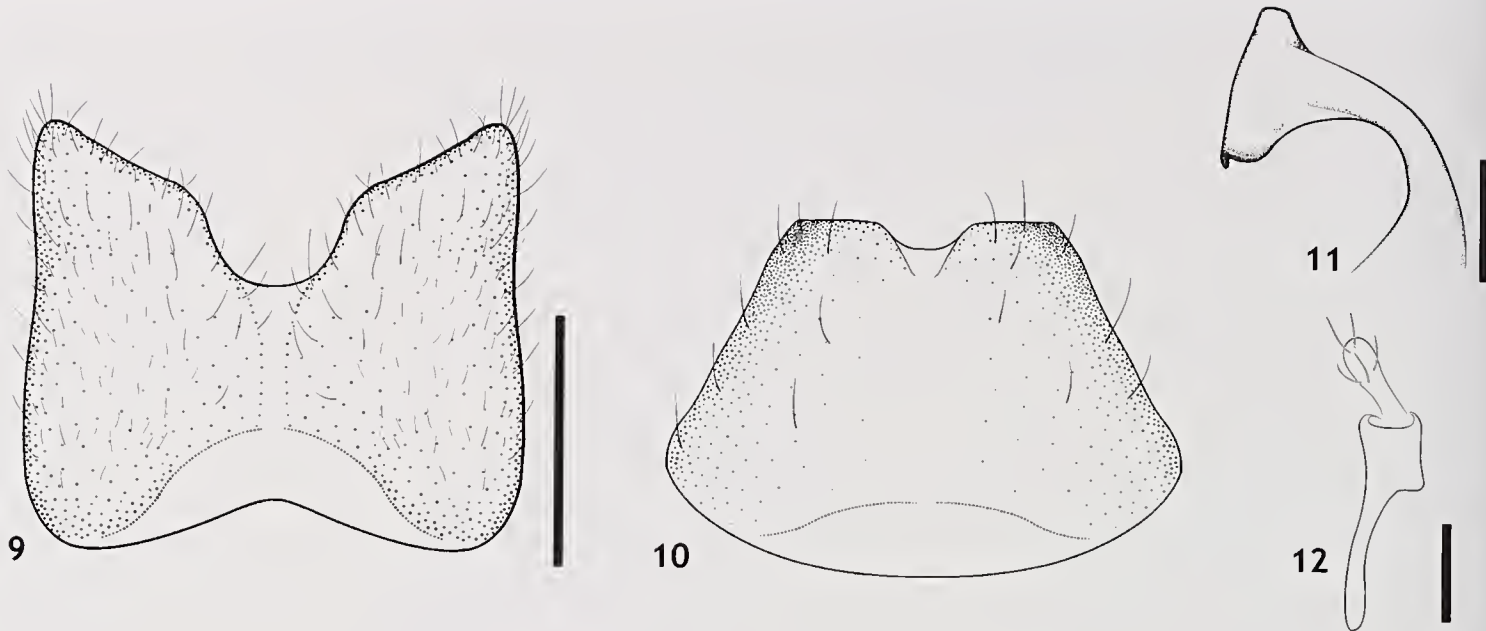
Figs 5-8. Aedeagus of *Paramaronius unituberculatus* sp. nov. (holotype, NMB). (5) Dorsal view. (6) Left view. (7) Ventral view. (8) Right view. Scale = 0.5 mm.

margin almost straight and with a small notch at middle; coxites (Fig. 12) small and membranous, base long and slender; styles short, wider apically.

**Dimensions:** Total length 7.5-9.0 mm.

**Remarks:** *Paramaronius unituberculatus* sp. nov. is similar to *P. kraatzi* (Pic, 1938) and *P. freyi* Wittmer, 1963 in the typical elytral sculpture and in the rugosity

on the left surface of the tegmen. It differs from these species by the colouration of head, antennae, pronotum and legs, apex of elytra with just one tubercle (two tubercles in *P. kraatzi* and three in *P. freyi*), shape of seventh abdominal ventrite of males and females, shape of aedeagus and parameres, and less roughness of tegmen. Males of *P. impressipennis* (Pic, 1906), from Argentina and Brazil, differ from *P. unituberculatus*



Figs 9-12. *Paramaronius unituberculatus* sp. nov. (9) Seventh ventrite of the male (holotype, NMB). (10) Seventh ventrite of the female (paratype, MZSP). (11) Right paramere of aedeagus (holotype, NMB). (12) Right coxite of female (paratype, MZSP). Scales: 9-10 = 0.5 mm, 11-12 = 0.2 mm.

sp. nov. by the presence of elytra with one longitudinal ridge on posterior half, without deep grooves and tubercles. Females differ especially by the shape of distal margin of the last abdominal ventrites.

The most recent identification key (Biffi, 2015) has to be modified to include the new species as follows:

- 4 Head, pronotum and legs completely testaceous; antennae testaceous, darker from antennomere 7 to apex; males: each elytron with one median and two apical tubercles ..... *P. kraatzii* (Pic)
- Head dark brown to black; pronotum completely yellow or with two brown patches on lateral margin; males: each elytron with one or three apical tubercles ..... **4a**
- 4a** Head black; pronotum completely yellow or with two brown spots on lateral margins; legs yellow with brown spots on apex of femora and tibiae, tarsi brown; antennae brown, slightly lighter on two first and three last antennomeres; males: each elytron with one median and three apical tubercles ..... *P. freyi* Wittmer
- Head dark brown; pronotum with two brown spots on lateral margins; legs light brown, darker on dorsal surface of femora, tarsi brown; antenna completely dark brown; males: each elytron with low median and apical tubercle (Fig. 3) .....  
..... *P. unituberculatus* sp. nov.

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